SEVCON®

Electrification Partner

MicropaK

DC Motor Controller

Utilizing the same innovative design techniques as the PowerpaK, the MicropaK range offers an ultracompact solution specifically for use on low voltage/low power applications.

The MicropaK has a similar footprint to Sevcon's PowerpaK, but the reduced profile is ideally suited for smaller applications where space is at a premium.

Features

- Compact design
- Silent operation
- Sevcon CAN compatible
- Integrated logic unit
- Built-in speed control
- FLASH memory
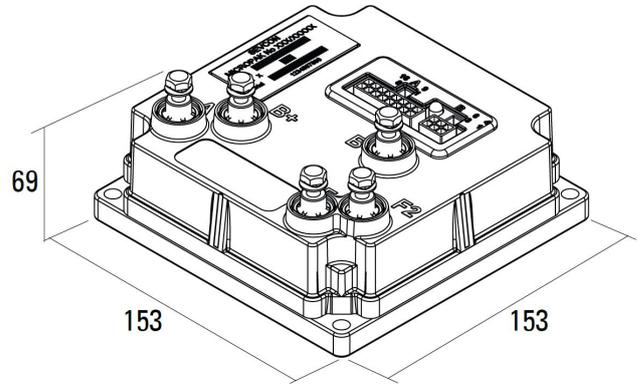- IP66 protection

Key Parameters

24/36 VDC Version:
- Operating voltage range 14.5VDC to 50 VDC
- Output motor phase current:
    - o 270A (1 min)
    - o 100 Arms (1 hour)

48 VDC Version:
- Operating voltage range 30 VDC to 75 VDC
- Output motor phase current:
    - o 270A (1 min)
    - o 100 Arms (1 hour)

- IP66 Protection
- Weight 1.5kg

Mechanical Interface

Separately Excited Motors (SEM)

SEM offers a contactor-free solution to regenerative braking and field weakening, with improved efficiency. The MicropaK offers improved speed control without added sensors. MicropaK can either be used in single or twin motor systems, where it can be configured as master or slave.

Flash Memory for increased Flexibilty

Because application programs are stored in Flash Memory, the controller can be reprogrammed in-situ, increasing flexibility and commonality of system design.

Inputs & Outputs

Standard configurations of digital and analog inputs and outputs (I/O) are especially suitable for twin motor applications. Functions include throttle inputs, limit switch inputs, contactor drives, hour counters, and instrumentation. This allows use as a standalone unit or to be integrated into a vehicle system.

- 6 Digital Switch Inputs
- 2 Analogue Inputs
- 2 Contactor Drive Outputs

Can Communications

The MicropaK controllers use the Sevcon Controller Area Network (CAN) serial communications bus. This allows multiple controllers to effectively communicate within the vehicle system to increase safety and reliability with the minimum of wiring.

Enhanced Reliability & Performance

Sevcon's patented MOSFET switching design delivers peak dependability and performance, as well as silent operation utilizing a 16 kHz high switching frequency.